

REMARKS

Claims 1-11, 21 and 39-53 were pending.

Claim 3 is cancelled without prejudice or disclaimer.

Claims 1, 4 and 8 are amended.

Claims 54, 55 and 56 are added. Claims 54 and 55 are supported by original claim 8. New claim 56 is supported by original claim 1 and by the specification at page 8, lines 1-11.

Accordingly, claims 1-2, 4-11 and 39-56 are pending and at issue.

A replacement IDS is submitted herewith, as requested by the Examiner.

It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance. Reconsideration of the application in view of the above amendments and the following remarks is requested.

I. Status of the Claims

The Office Action indicates that the pending claims are claims 1-11, 26, 34 and 35, with claims 11, 34 and 35 being withdrawn from consideration. Applicants respectfully submit that the pending claims also include claims 39-52, which were added in the Amendment submitted on February 18, 2002. Claims 39-52 are listed above.

II. Priority

Applicants' claim to priority of Danish patent applications PA 1999 001415, filed October 1, 1999, and PA 2000 00251, filed February 17, 2000, is acknowledged. However, the Examiner states that although a paper is present in the Application that appears that Applicant has intended to furnish the priority documents as required under 35 U.S.C. 119(b), the documents are not in the application.

Applicants note that certified copies of the Danish priority documents were submitted with the filing of the above-captioned application, as verified by the return receipt post card. Nevertheless, Applicants will again obtain certified copies of the Danish priority applications for submission to the USPTO and compliance with 35 U.S.C. 110(b).

III. Information Disclosure Statement

The Examiner notes that the original information disclosure statement (1449) is missing, although the references have been considered. The Examiner requests Applicant to furnish a new 1449 and the Examiner will sign and date and send a copy in the next correspondence.

As requested, enclosed is a new information disclosure statement.

IV. The Rejection of Claims 4 and 8 under 35 U.S.C. 112

Claims 4 and 8 are rejected under 35 U.S.C. 112 as being indefinite. Claim 4 is rejected as indefinite as a result of the phrase "such as...." Claim 8 is rejected as indefinite on the basis that size is mutually exclusive of mass, and thus the size cannot be given in terms of mass.

Claim 4 has been amended to delete the phrase "such as..." which now forms the basis for new dependent claims. Claim 8 is amended to clarify that the size is not being defined by the mass, or vice-versa.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 112. Applicants respectfully request reconsideration and withdrawal of the rejection.

V. The Rejection of Claims 1-6 and 9-10 under 35 U.S.C. 103

Claims 1-6 and 9-10 are rejected under 35 U.S.C. 103 as being unpatentable over Kamel et al. (U.S. Pat. No. 5,230,822). To expedite prosecution, claim 1 has been amended to include the recitation of dependent claim 3, namely, that the size of the enzyme core unit, in terms of its diameter in its longest dimension, is "no more than 1000 μm ."

Claim 3 was included in the obviousness rejection over Kamel et al. apparently because Kamel et al. disclose a range of diameters for the core unit of "100 to 2,500 μm ", which overlaps with the diameter recited in claim 3 of "no more than 1000 μm ." See page 6 of the Office Action (citing col. 4, lines 5-6 of Kamel et al.)

Foremost, Kamel et al. does not teach that the diameter of the core unit should be "no more than 1000 μm ." To the contrary, Kamel discloses that the core unit can be up to 2,500 μm .

However, even based on Kamel et al.'s disclosure of a broad range of 100 to 2,500 μm , one of ordinary skill in the art would not have found it obvious to prepare an enzyme-containing granule in which the core unit is "no more than 1000 μm " and in which the ratio of the ratio between the diameter of the granule and the diameter of the core unit "is at least 1.1" (claim 1) or "at least 2.5" (claim 2). Indeed, nowhere do Kamel et al. teach or suggest that the size of the core unit (or the shell unit), and relative size of the core unit compared to the granule is a result effective variable with respect to advantages obtained by the present invention, including, in particular, in preparation and handling of the enzyme-containing granules. Clearly, there is no appreciation in Kamel et al. of the importance of using smaller core units and thicker shell

units.

Applicants have determined that improved enzyme-containing granules are obtained by using relatively small core units and relatively thick shell units. See, e.g., the specification at page 6, lines 10 to page 7, line 9 (discussing the relationship between the core and the shell units, and the surprising benefits obtained by focusing parameters); page 8, lines 1-9 (describing the small core unit); page 17, line 5-12 (describing some of the advantages of the small core unit); page 17, lines 15-10 (describing the thick shell unit); and page 19, lines 10-29. Notably, the granules of the present invention also provide certain significant unexpected advantages in terms of preparation and handling, which were clearly not predicted in the art. See the specification at page 21, line 32, to page 24, line 5.

Accordingly, Kamel et al. do not suggest the claimed invention because the critical parameter of the size of the core unit (and the size of the shell) must first be recognized as a result-effective variable before the artisan would optimize the teaching of Kamel et al. to arrive at the claimed invention. See MPEP 2144.05 B ("A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation.")

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 103. Applicants respectfully request reconsideration and withdrawal of the rejection.

VI. The Rejection of Claims 7 and 8 under 35 U.S.C. 103

Claims 7 and 8 are rejected under 35 U.S.C. 103 as being unpatentable over Kamel et al. in view of Paatz et al. This rejection is respectfully traversed.

For the reasons discussed above, Kamel et al. do not suggest the present invention. Paatz et al. is not relied upon in a manner to, and, in fact, Paatz et al. do not, address the deficiencies of Kamel et al. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

VII. Conclusion

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to

contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

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